

## **REMARKS**

Prior to this Reply, Claims 1-47 were pending. Through this Reply, Claims 1, 3, 6, 7, 9, 11-13, 18, 21, 23, 26, 28, 30-34, 36, 38, 39, 41 and 45-47 have been amended. Furthermore, Claims 48 and 49 have been added. Claims 2 and 8 have been cancelled without prejudice to, or disclaimer of, the subject matter contained therein. Accordingly, Claims 1, 3-7 and 9-49 are now at issue in the present case.

### **I. Allowable Subject Matter**

The Examiner objected to Claims 38 and 44 as being dependent upon a rejected base claim. However, the Examiner indicated that such claims would be allowable if they were rewritten in independent form to include all of the limitations of their respective base claims and any intervening claims.

In response, Applicants are submitting new Claims 48 and 49, which substantially correspond with the limitations of Claims 38 and 44 (including their respective base claims and any intervening claims). Applicants believe that Claims 48 and 49 are in condition for allowance.

### **II. Claim Rejections**

The Examiner rejected Claims 1-12, 32-37 and 39-43 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,178,054 to Wakefield (hereinafter “Wakefield”). The Examiner also rejected Claims 13, 18, 23 and 28 under 35 U.S.C. § 103(a) as being unpatentable over Wakefield in view of U.S. Patent No. 4,783,705 to Moon et al. (hereinafter “Moon”). In addition, the Examiner rejected Claims 14-17, 19-22, 24-27, 29-31 and 45-47 under 35 U.S.C. §

103(a) as being unpatentable over Wakefield and Moon as applied to Claim 28, and further in view of U.S. Patent No. 6,519,107 to Ehrlich et al. (hereinafter "Ehrlich").

Without necessarily agreeing with the Examiner's assertions, Applicants have amended the independent claims (except for new independent Claims 48 and 49) to distinguish such claims from the cited references. Specifically, the manner that Wakefield selects write thresholds is different from that claimed (see, e.g., Col. 7, line 1 to Col. 11, line 48 of Wakefield).

More specifically, as explained in Col. 7, lines 35-65 of Wakefield, a narrow head test is performed on a selected track by writing test data to selected user data fields of the selected track at an off-track center level. Once the test data has been written, an attempt is made to read the test data after the head has been positioned over the track center. According to Wakefield at Col. 7, lines 48-50), the reading of test data desirably occurs over a number of revolutions of the disk. An error rate is measured. Test data may then be written at other off-track center levels. The error rate measurements associated with the off-track center levels are temporarily stored in memory.

From Col. 7, line 66 to Col. 8, line 29, Wakefield also describes a wide head test. Without going into the details of Wakefield's wide head test, again, test data is written to the selected track and to adjacent tracks for various off-track center levels. The head is used to read the test data, and an error rate is obtained for each of the off-track center levels.

As described in Col. 8, lines 30-37, the particular write thresholds are determined based upon the error rates determined in the narrow head test and the wide head test. Once determined, these thresholds are stored in a table in memory. More details for selecting the final write thresholds are provided in connection with Fig. 10 of Wakefield.

Advantageously, the present invention does not require test data to be written onto a disk surface in order to obtain write fault threshold values (or other somewhat similar limitations presented in the independent claims). That is, valuable time is not wasted writing test data onto the disk surface and then later reading it (e.g., over several revolutions, as described as being preferable in Wakefield).

Instead, write fault threshold values are derived using a position error signal (PES), in the absence of writing test data onto the disk surface for deriving independent the write fault threshold values. For at least this reason (or reasons similar thereto), Applicants believe that independent Claims (1, 13, 18, 23, 28, 32, 39, 45, 46 and 47) are patentably distinguishable from Wakefield. Applicants submit that neither Moon, nor Ehrlich provide the missing limitation.

### **III. Other Claim Amendments and Amendments to the Specification**

Many of the claims have been amended to correct grammatical or typographical errors. In addition, certain of the claims have been amended for clarity.

In addition, certain paragraphs of the Specification have been amended to correct typographical or grammatical errors. No new matter has been added.

### **IV. Additional Claim Fees**

In determining whether additional claim fees are due, reference is made to the Fee Calculation Table (below).

**Fee Calculation Table**

|                                 | Claims Remaining<br>After Amendment |       | Highest Number<br>Previously Paid For | Present<br>Extra | Rate     | Additional Fee |
|---------------------------------|-------------------------------------|-------|---------------------------------------|------------------|----------|----------------|
| Total<br>(37 CFR 1.16(c))       | 47                                  | Minus | 47                                    | = 0              | x \$18 = | \$ 0.00        |
| Independent<br>(37 CFR 1.16(b)) | 12                                  | Minus | 10                                    | = 2              | x \$86 = | \$ 172.00      |

As set forth in the Fee Calculation Table (above), Applicants previously paid claim fees for forty-seven (47) total claims and for ten (10) independent claims. Accordingly, the Commissioner is hereby authorized to charge Deposit Account No. 50-2198 in the amount of \$172.00 for the presentation of two (2) independent claims in excess of ten (10).

Applicants believe that no other fees are due. Nevertheless, the Commissioner is hereby authorized to charge Deposit Account No. 50-2198 for any fee deficiencies associated with filing this paper.

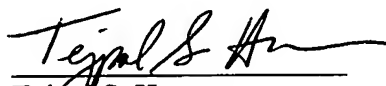
**V. Conclusion**

It is believed the above comments establish patentability. Applicants do not necessarily accede to the assertions and statements in the Office Action, whether or not expressly addressed.

Applicants believe that the application appears to be in form for allowance. Accordingly, reconsideration and allowance thereof is respectfully requested.

The Examiner is invited to contact the undersigned at the below-listed telephone number regarding any matters relating to the present application.

Respectfully submitted,



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Date: SEPT. 23, 2024